



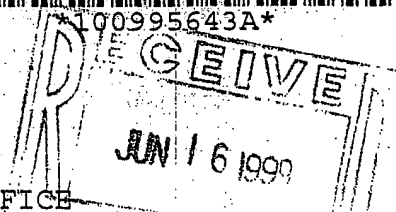
UNITED STATES DEPARTMENT OF COMMERCE  
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118 NORTH TIOGA STREET  
ITHACA, NEW YORK 14850



UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 03/08/1999

REEL/FRAME: 9838/0644  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
ZUA, ZUHUA

DOC DATE: 02/18/1999

ASSIGNOR:  
LO, YU-HWA

DOC DATE: 02/18/1999

ASSIGNOR:  
EJECKAM, FELIX

DOC DATE: 02/24/1999

ASSIGNEE:  
NOVA CRYSTALS, INC.  
30 BROWN ROAD  
ITHACA, NEW YORK 14850

SERIAL NUMBER: 09247413  
PATENT NUMBER:

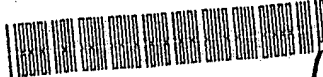
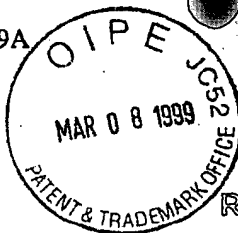
FILING DATE: 02/10/1999  
ISSUE DATE:

DOROTHY RILEY, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

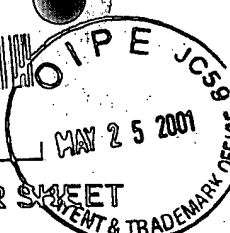
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Expires 09/30/99  
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03-29-1999

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Reel #  Frame #

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- Execution Date  
Month Day Year  
**02/18/99**

Name (line 1) **Yu-Hwa Lo**Name (line 2) **Second Party**Name (line 1) **Felix Ejeckam**Name (line 2) Execution Date  
Month Day Year  
**02/24/99****Receiving Party**

- ☐ **Mark if additional names of receiving parties attached**

Name (line 1) **Nova Crystals, Inc.**Name (line 2) Address (line 1) **30 Brown Road**Address (line 2) Address (line 3) **Ithaca**

City

**New York US**

State/Country

**14850**

Zip Code

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Correspondent Name and Address

Area Code and Telephone Number (607) 256-2000

Name Brown, Pinnisi and Michaels, PC

Address (line 1) 400 M&T Bank Building

Address (line 2) 118 North Tioga Street

Address (line 3) Ithaca, New York 14850

Address (line 4)

Pages Enter the total number of pages of the attached conveyance document including any attachments. # 1

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

09/214,713

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT

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Number of Properties

Enter the total number of properties involved. #

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$

40.00

Method of Payment:  
Deposit Account

Enclosed ☒

Deposit Account ☐

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Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Christopher R. Pastel

Name of Person Signing

Signature

Date

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MAY 25 2001

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

Conveying Party(ies)

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Execution Date  
Month Day Year

02/18/99

Name (line 1)

Zuhua Zua

Name (line 2)

Name (line 1)

Name (line 2)

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Execution Date  
Month Day Year

Receiving Party(ies)

Enter additional Receiving Party(ies)

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Application Number(s) or Patent Number(s)

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Patent Application Number(s)

Patent Number(s)



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## ASSIGNMENT AND AGREEMENT

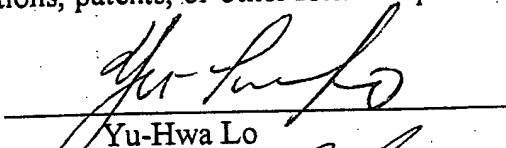
For value received, I, Yu-Hwa Lo, of Ithaca in the State of New York, Felix Ejeckam, of Ithaca in the State of New York and Zuhua Zhu of Ithaca in the State of New York, hereby sell, assign and transfer to Nova Crystals, Inc., having an office at 30 Brown Road, Ithaca, New York 14850, and its successors, assigns and legal representatives (hereinafter referred to as the "Assignee"), the entire right, title and interest, for the United States of America, in and to certain inventions related to the "METHOD FOR DESIGN OF EPITAXIAL LAYER AND SUBSTRATE STRUCTURES FOR HIGH-QUALITY EPITAXIAL GROWTH OF LATTICE-MISMATCHED SUBSTRATES" described in an application for Letters Patent of the United States, executed by me of even date here with, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign and transfer to Assignee the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize Assignee to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from me, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

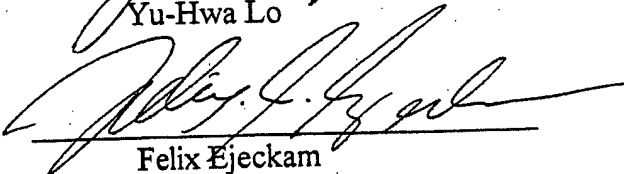
I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Assignee to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to Assignee in the United States and in all countries foreign to the United States, or to such nominees as Assignee may designate.

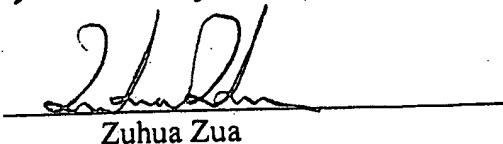
I agree that, when requested, I shall, without charge to Assignee, but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

  
Yu-Hwa Lo

2/18/99  
Date

  
Felix Ejeckam

2/24/99  
Date

  
Zuhua Zua

2/18/1999  
Date



Docket No. NOR-9

DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

- My residence, post office address and citizenship are as stated below next to my name.
- I believe I am an original, first and joint Inventor of the subject matter which is claimed and for which a patent is sought on the Invention entitled "METHOD FOR DESIGN OF EPITAXIAL LAYER AND SUBSTRATE STRUCTURES FOR HIGH-QUALITY EPITAXIAL GROWTH ON LATTICE-MISMATCHED SUBSTRATES", the specification of which
  - ☐ is attached hereto
  - ☒ was filed on 2/10/99 as
    - ☒ United States Application Number - 09/247,413
    - ☐ PCT International Application Number
  - ☐ was amended on
- I hereby state that I have reviewed and understand the contents of the above-identified application, including the claim and the drawing.
- I acknowledge the duty to disclose information which is material to patentability, as defined in 37 CFR §1.56. If this application claims priority from a prior application, I acknowledge the duty to disclose information which is material to patentability, as defined 37 CFR §1.56, which became available between the filing date of the prior application and the date of this application.
- As to the subject matter of this application:
  - a. I do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof;
  - b. I do not know and do not believe that the same was ever patented or described in any printed publication in any country before my invention thereof, or more than one year prior to the date of this application;
  - c. I do not know and do not believe that the same was in public use or on sale in the United States of America more than one year prior to the date of this application; and
  - d. Said subject matter has not been patented or made the subject of an inventor's certificate issued in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months prior to the date of this application.

Please associate this application with USPTO Customer Number 020808

- o I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Michael F. Brown, Reg. No. 29,619  
Christopher A. Michaels, Reg. No. 34,390  
Christopher R. Pastel, Reg. No. 37, 694  
L. George Legg, Reg. No. 34,208

- o Address all telephone calls to Christopher R. Pastel at telephone number 607-256-2000
- o Fax communications should be sent to telephone number 607-256-3628
- o E-mail communications should be addressed to: crpastel@bpmlegal.com

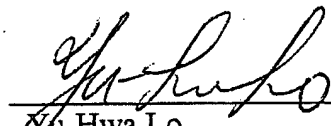
"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file"

- o Address all correspondence to:

Brown, Pinnisi and Michaels, P.C.  
400 M&T Bank Building-118 North Tioga Street  
Ithaca, New York 14850-4343

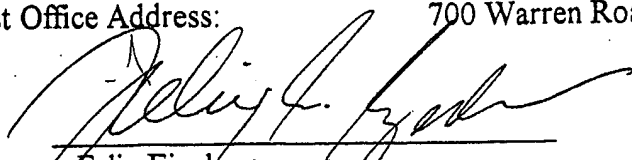
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first or sole Inventor: Yu-Hwa Lo  
Residence: Ithaca, New York  
Citizenship: USA  
Post Office Address: 146 Lexington Drive, Ithaca, New York 14850

  
Yu-Hwa Lo

2/18/99  
Date

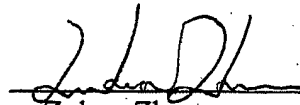
Full name of second joint Inventor: Felix Ejeckam  
Residence: Ithaca, New York 14850  
Citizenship: USA  
Post Office Address: 700 Warren Road, #17-1C, Ithaca, New York 14850

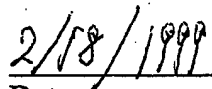
  
Felix Ejeckam

2/24/99  
Date



Full name of third joint Inventor: Zuhua Zhu  
Residence: Ithaca, New York  
Citizenship: China  
Post Office Address: 134 Graham Road, Apt. 1B1, Ithaca, New York 14850

  
\_\_\_\_\_  
Zuhua Zhu

  
\_\_\_\_\_  
Date

Applicant or Patentee: Yu-Hwa Lo, Felix Ejeckan and Zuhua Zua

Attorney's

Serial or Patent No.

Docket No.: NOR-9

Filed or Issued: February 10, 1999

Title: METHOD AND DESIGN OF EPITAXIAL LAYER AND SUBSTRATE STRUCTURES FOR HIGH-QUALITY EPITAXIAL GROWTH OF LATTICE-MISMATCHED SUBSTRATES

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(c)) -- SMALL BUSINESS CONCERN

I hereby declare that I am:

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN:

Nova Crystals, Inc.

ADDRESS OF SMALL BUSINESS CONCERN:

30 Brown Road, Ithaca, New York 14850

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled: METHOD AND DESIGN OF EPITAXIAL LAYER AND SUBSTRATE STRUCTURES FOR HIGH-QUALITY EPITAXIAL GROWTH OF LATTICE-MISMATCHED SUBSTRATES, by inventor(s) Yu-Hwa Lo, Felix Ejeckam and Zuhua Zua described in

- ☒ the specification filed herewith  
☐ application serial no. , filed  
☐ patent no. , issued

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention availing to their status as small entities. (37 CFR 1.27)

NAME:

ADDRESS:

☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NONPROFIT ORGANIZATION

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I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

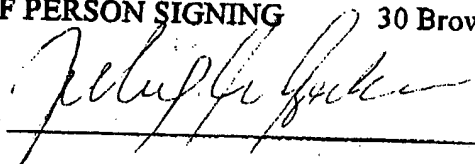
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, and patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Felix Ejeckam

TITLE OF PERSON IF OTHER THAN OWNER CEO

ADDRESS OF PERSON SIGNING 30 Brown Road, Ithaca, NY 14850

SIGNATURE



DATE

2/10/99